CLAIMS

1. Voltage stabiliser for electrical energy transportation and distribution applications, of the kind designed for use as a voltage stabiliser for electrical energy transportation and distribution applications, able to be installed in single phase and three phase networks, consisting of one or several devices of transformer type, which in incremental steps regulates the output voltage that reaches the consumer, characterised in that it comprises a transformer, trip/contactor/relay elements, and a control panel, the transformer taking the form of a transformer of primary voltage similar to the nominal single phase line voltage (Vfn) and of secondary voltage equal to the maximum voltage increase it is wished to inject into the line (Viny), the primary winding being double wound in two electromagnetically identical coils, including a power-cutting element (C1) with one normally closed contact and one normally open, having a nominal current corresponding to the nominal current of the line and incorporating two isolator elements (R1 and R2), each of which is provided with two normally open contacts and two that are normally closed, with a nominal current of V_{fn}/V_{iny}, the current of the line and having a control panel composed of a microprocessor that measures the output voltage and sends the orders to the trip, contactor and relay elements.

2. Voltage stabiliser for electrical energy transportation and distribution applications, according to the first claim, characterised in that the isolator elements R1 and R2 may be substituted by static trip elements.

3. Voltage stabiliser for electrical energy

transportation and distribution applications, according to the first claim, characterised in that the stabiliser may be embodied for a three phase network by triplicating the equipment.

4. Voltage stabiliser for electrical energy transportation and distribution applications, according to the first and the third claims, characterised in that the stabiliser may be embodied for a three phase network by triplicating the number of contactor and relay poles for their joint control.

5. Voltage stabiliser for electrical energy transportation and distribution applications, characterised in that the primary winding is double wound in two electromagnetically identical coils, thus permitting its connection at the 2*Vfn/Viny connection, giving a power in the case of downstream compensation of Viny*Ilinea, where Ilinea is the nominal line current on the stabilised side.

6. Voltage stabiliser for electrical energy transportation and distribution applications, according to the first and the fifth claims, characterised in that the upstream compensation gives a stabiliser power of Viny*Ilinea (1+Viny/Vfn).

7. Voltage stabiliser for electrical energy transportation and distribution applications, according to the preceding claims, characterised in that it is endowed with a transformer with a primary winding provided with two or four coils, which may be connected in series, in parallel or in series and parallel.

8. Voltage stabiliser for electrical energy

transportation and distribution applications, according to the first and the seventh claims, characterised in that it incorporates a charge cutting element and two isolator elements for disconnecting the primary and short-circuiting the secondary.